PRE-CERCLIS SCREENING ASSESSMENT CHECKLIST/DECISION FORM

This checklist can assist the site investigator during the Pre-CERCLIS screening. It will be used to determine whether further steps in the site investigation process are required under CERCLA. Use additional sheets for the narrative.

Checklist Preparer: **Ghassan Tafla** **January 11, 2008**

347 North Dunbridge Road
Bowling Green, Ohio 43402
(Address)

(419) 373-3039
(Phone)

Ghassan.tafla@epa.state.oh.us
(E-Mail Address)

Site Name: Fostoria Industries

Previous Names (if any): Fostoria Industries

Site Location: 1200 North Main Street
(Street)

Fostoria	Seneca	Ohio	44830 - 1911
(City)	(County)	(ST)	(Zip + 4)

5
(Congressional District)

Latitude: N 41° 10' 26.0" **Longitude:** W 83° 24' 49.8"

With regards to the Latitude and Longitude, please provide the following information: Accuracy in Meters +/- **10 Meters**, Collection Method: **Garmin's GPS Unit**, Reference Datum, Reference Point, Source Map Scale, Point/Line/Area; Collection Date; Verification Method (see attached):

Complete the following checklist. If "yes" is marked, please explain below.	**YES**	**NO**
1. Does the site already appear in CERCLIS?	☐	X
2. Is the release from products that are part of the structure of, and result in exposure within, residential buildings or businesses or community structures?	☐	X
3. Does the site consist of a release of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found?	☐	X
4. Is the release into a public or private drinking water supply due to deterioration of the system through ordinary use?	☐	X
5. Is some other program actively involved with the site (i.e., another Federal, State, or Tribal program)?	☐	X
6. Are the hazardous substances potentially released at the site regulated under a statutory exclusion (i.e., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the NRC, UMTRCA, or OSHA)?	☐	X
7. Are the hazardous substances potentially released at the site excluded by policy considerations (e.g., deferral to RCRA Corrective Action)?	☐	X
8. Is there sufficient documentation that clearly demonstrates that there is no potential for a release that could cause adverse environmental or human health impacts (e.g., comprehensive remedial investigation equivalent data showing no release above ARARs, completed removal action, documentation showing that no hazardous substance releases have occurred, EPA approved risk assessment completed)?	☐	X
9. Is there documentation indicating that a target (e.g., drinking water wells, drinking surface water intakes, etc.) has been exposed to a hazardous substance released from the site?	X	☐

10. Is there an apparent release at the site with no documentation of exposed targets, but there are targets on-site or immediately adjacent to the site or nearby (within 1 mile)?	X	☐
11. Are there no releases or potential to release?	☐	X

Please explain all "yes" answer(s), attach additional sheets or refer to narrative:

~~**Site Determination:** **X** Enter the site into CERCLIS. Further assessment is recommended (explain below).~~

☐ The site is not recommended for placement into CERCLIS (explain below).

DECISION/DISCUSSION/RATIONALE:

Fostoria Industries is a potential source of contamination that has occurred and continues to occur to the groundwater in the Northern Fostoria area. Sampling analysis of private residential water supplies north of the site detected the presence of Trichloreethene (TCE) and Trans-1-2 Dichloroethene at maximum levels of 23.4 ppb and 26.7 ppb respectively. Therefore, the risk associated with this site is water ingestion and/or vapor inhalation due to the existing groundwater migration pathway.

EPA Regional Review and Site Assessment Decision

Check the box(es) that apply:

☐ **Not a Valid Site or Incident**
X **Incident for Further Action Under CERCLA**

Recommended Further Action:

X **APA**
☐ **Full PA**
☐ **Combined PA/SI**
X **SI**

Defer/Refer to:

☐ **Removal Program**
☐ **State/Tribal Program**
☐ **RCRA**
☐ **Brownfields**
☐ **Other:** _____

Regional EPA Reviewer: Erica Islas Erica Islas — Print Name/Signature — 10/9/08 — Date

State Agency/Tribe: Tiffani Kavalec — Print Name/Signature — 11-6-08 — Date

PRE-CERCLIS SCREENING ASSESSMENT CHECKLIST/DECISION FORM

This checklist can assist the site investigator during the Pre-CERCLIS screening. It will be used to determine whether further steps in the site investigation process are required under CERCLA. Use additional sheets for the narrative.

Checklist Preparer: **Ghassan Tafla** **January 11, 2008**

347 North Dunbridge Road (419) 373-3039

Bowling Green, Ohio 43402 (Phone)

(Address)

Ghassan.tafla@epa.state.oh.us
(E-Mail Address)

Site Name: Fostoria Industries

Previous Names (if any): Fostoria Industries

Site Location: 1200 North Main Street
(Street)

Fostoria (City) Seneca (County) Ohio (ST) 44830 (Zip)

5
(Congressional District)

Latitude: N 41° 10' 26.0" **Longitude:** W 83° 24' 49.8"

With regards to the Latitude and Longitude, please provide the following information: Accuracy in Meters +/- **10 Meters**, Collection Method: **Garmin's GPS Unit**, Reference Datum, Reference Point, Source Map Scale, Point/Line/Area; Collection Date; Verification Method (see attached):

Complete the following checklist. If "yes" is marked, please explain below.	**YES**	**NO**
1. Does the site already appear in CERCLIS?	☐	X
2. Is the release from products that are part of the structure of, and result in exposure within, residential buildings or businesses or community structures?	☐	X
3. Does the site consist of a release of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found?	☐	X
4. Is the release into a public or private drinking water supply due to deterioration of the system through ordinary use?	☐	X
5. Is some other program actively involved with the site (i.e., another Federal, State, or Tribal program)?	☐	X
6. Are the hazardous substances potentially released at the site regulated under a statutory exclusion (i.e., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the NRC, UMTRCA, or OSHA)?	☐	X
7. Are the hazardous substances potentially released at the site excluded by policy considerations (e.g., deferral to RCRA Corrective Action)?	☐	X
8. Is there sufficient documentation that clearly demonstrates that there is no potential for a release that could cause adverse environmental or human health impacts (e.g., comprehensive remedial investigation equivalent data showing no release above ARARs, completed removal action, documentation showing that no hazardous substance releases have occurred, EPA approved risk assessment completed)?	☐	X
9. Is there documentation indicating that a target (e.g., drinking water wells, drinking surface water intakes, etc.) has been exposed to a hazardous substance released from the site?	X	☐

10. Is there an apparent release at the site with no documentation of exposed targets, but there are targets on-site or immediately adjacent to the site or nearby (within 1 mile)?	X	☐
11. Are there no releases or potential to release?	☐	X

Please explain all "yes" answer(s), attach additional sheets or refer to narrative:

Site Determination: **X** Enter the site into CERCLIS. Further assessment is recommended (explain below).

☐ The site is not recommended for placement into CERCLIS (explain below).

DECISION/DISCUSSION/RATIONALE:

Fostoria Industries is a potential source of contamination that has occurred and continues to occur to the groundwater in the Northern Fostoria area. Sampling analysis of private residential water supplies north of the site detected the presence of Trichloreethene (TCE) and Trans-1-2 Dichloroethene at maximum levels of 23.4 ppb and 26.7 ppb respectively. Therefore, the risk associated with this site is water ingestion and/or vapor inhalation due to the existing groundwater migration pathway.

EPA Regional Review and Site Assessment Decision

Check the box(es) that apply:

☐ **Not a Valid Site or Incident**
X **Incident for Further Action Under CERCLA**

Recommended Further Action:

X **APA**
☐ **Full PA**
☐ **Combined PA/SI**
X **SI**

Defer/Refer to:

☐ **Removal Program**
☐ **State/Tribal Program**
☐ **RCRA**
☐ **Brownfields**
☐ **Other:** _____

Regional EPA Reviewer: _____ _____
Print Name/Signature Date

State Agency/Tribe: _____ _____
Print Name/Signature Date

Ohio Environmental Protection Agency
Division of Emergency and Remedial Response

Pre-CERCLIS Screening
Assessment Checklist Decision Form and Report

For

Fostoria Industries Inc.
1200 North Main Street
Fostoria, Ohio 44830

Prepared by: _____ **Date:** _____
Ghassan Tafla, Site Coordinator
Ohio EPA, DERR/NWDO

Reviewed by: _____ **Date:** _____
Archie Lunsey II, Supervisor
Ohio EPA, DERR/NWDO

Approved by: _____ **Date:** _____
Erica Islas, Early Action Manager
U.S. EPA, Region 5

EPA-540-F-98-039
OSWER 9375.2-11FS
Updated by EPA – Region 5

October 1999
PB98-963310
May 2006

Introduction:

During a sampling event collected in 1984, from Autolite facility's wastewater effluent, Autolite found evidence of trichloroethylene (TCE) and other volatile organic compounds (VOCs), including benzene were detected coming from the process water generated from two on-site wells, B-1 and B-2. As a result, additional environmental investigations performed and revealed the presence of VOCs not only beneath the Autolite facility but in wells located off-site including residential wells. This finding prompted Ohio EPA and the Local Department of Health to expand the area and scope of investigations to include other areas of potentially significant groundwater discharge. One of these areas includes the Fostoria Industries.

The initial Fostoria Area investigations were performed to assess the general depths, direction(s), and rates of groundwater flow. More than 85 residential and commercial wells were sampled for VOC concentrations including the industrial wells of Fostoria Industries Inc., (FII). The initial groundwater investigations revealed VOC concentrations ranging from 162 to 20,700 ppb detected in the industrial and monitoring wells. In an effort to determine the extent of VOC contamination in Fostoria's groundwater supply, Ohio EPA conducted a survey of area industries in 1985; this survey addressed solvent usage and operating practices at various industries. FII responded to the survey and stated that the facility had used trichloroethylene, methyl-ethyl-ketone (MEK) and toluene in their daily operation. Please see Appendix A.

Location:

The Fostoria Industries Inc., is an active 12-acre manufacturing facility that produces industrial control panels, a complete line of electric and gas heating, ventilation and task lighting equipment for the commercial and industrial industries. The facility is located at 1200 North Main Street in industrial area in northern Fostoria, Seneca County, Ohio. According to the Seneca County Auditor, the property is identified as Parcels:

P51010859280000	FOSTORIA INDUSTRIES INC	0.1632-acre
P51010859320000	FOSTORIA INDUSTRIES INC	0.1879-acre
P51010859360000	FOSTORIA INDUSTRIES INC	0.1722-acre
P51010859400000	FOSTORIA INDUSTRIES INC	0.1879-acre
P51010859440000	FOSTORIA INDUSTRIES INC	0.1632-acre
P51010859480000	FOSTORIA INDUSTRIES INC	0.1632-acre
P51010859520000	FOSTORIA INDUSTRIES INC	0.1632-acre
P51010859560000	FOSTORIA INDUSTRIES INC	0.1632-acre
P51010859600000	FOSTORIA INDUSTRIES INC	0.2169-acre
P51010859640000	FOSTORIA INDUSTRIES INC	6.945-acre
P51010859680000	FOSTORIA INDUSTRIES INC	3.45-acre

The property location is identified in Figure 1 and property records from the County Recorder's office can be found in Appendix B.

History of Land Use:

According to the Sandborn Insurance maps on file at the online Public Library of the State of Ohio, the property at 1200 North Main Street was established in the early 1900's and operated under the name of "Press Steels" also known as "Fostoria Fender" which was involved in the manufacturing of stamp fenders and bumpers for the auto industries. In the early 1930s, the facility produced reflectors for Ford Motor Company's infrared process plants. Since 1940, the facility has been involved in developing and producing complete line of electric and gas heating, ventilation and task lighting equipment for the commercial and industrial industries. In May 1973, Tennessee Plastic Industries Corporation (TPI) of Johnson City, Tennessee purchased Fostoria Industries and in 1973 expanded the manufacturing building on the property.

Ground Water Sampling and Analysis:

Ground water samples collected during a period between August and November 1990 from six ground water monitoring wells and one on site production well by IEP Environmental Consultants. The collected ground water samples were analyzed for site specific parameters in order to characterize the ground water quality beneath the facility. The parameters included organic constituents through a VOC scan (EPA Method 8240), TPH and field parameters and phenol. Phenol was added to the site specific parameters to determine if the adjacent Chrysler Facility may have impacted the ground water at the Fostoria Industries. All ground water sample analysis was sent and performed by Wadsworth/Alert Laboratories of Pittsburgh, Pennsylvania. Laboratory analytical results collected from the site monitoring wells are summarized below:

Table 1
Summary of Analytical Results
Ground Water Sampling
October 1990

Component	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	Site Well
Trichloroethene (ppm)	0.150	0.920	0.220	ND	0.380	ND	1.200
1,1,1-Trichloroethane (ppm)	0.008	ND	ND	ND	0.110	ND	0.130
Tetrachloroethene (ppm)	ND	ND	ND	ND	ND	ND	ND
Tr-1,2-Dichlorothene (ppm)	0.0024	12.000	0.007	ND	0.029	ND	ND
1,1-Dichloroethen (ppm)	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride (ppm)	ND	0.140	ND	ND	ND	ND	ND
Total VOCs (ppm)	0.1604	13.060	0.227	ND	0.519	ND	1.330
Phenolics	ND	ND	ND	ND	ND	ND	ND
TPH (ppm)	ND	ND	ND	ND	ND	ND	1.2

ND = None Detected

Additional Groundwater analytical results for the on-site production well were found in the 1984 report prepared by T.A. Gleason Associates. VOC concentrations ranging from 162 to 20,700 ppb detected in the industrial production well of Fostoria Industries (see Appendix C).

Migration Pathway:

As the results shown in Table 1 above, the groundwater samples collected at the FII site contained elevated levels of trichloroethene detected in shallow monitoring wells MW-1, MW-2, MW-3 and the former site production well. 1, 1,1 Trichloroethane was detected in well MW-1 and the site well;trans-1,2-dichloroethene was detected in wells MW-1, MW-2 and MW-3; and vinyl chloride was detected in well MW-2.

Elevated levels of trichloroethene; 1,1,1-trichloroethane and trans-1,2-dichloroethene were also detected in the deep well, MW-5, which is located hydraulically downgradient of the site well. Isoconcentration maps depicting total VOC concentrations in both the shallow and deep well systems are presented in Figures 2 and 3.

According to the report prepared by IEP Environmental Consultants and shown by Figure 2, there appears to be three areas of ground water contamination in the shallow flow zone at the site. The first area is located in the vicinity of the former trichloroethene storage tanks and process degreasing area and includes well MW-1 and the former site production well. Total VOCs concentrations ranged from 0.160 to 1.330 ppm. The most likely source of contamination in this area is leakage from the former above ground trichloroethene storage tanks and associated former process degreasing area which contaminated the underlying soils. Ground water recharge (precipitation) has dissolved some of the chlorinated solvents in the soil and they have migrated downward to the water table.

The second area of shallow ground water contamination according to the report prepared by IEP Environmental Consultants is located on the eastern edge of the property at monitoring well MW-2. This well is located adjacent to the City of Fostoria Sewer Line which runs east/west across the site. Total VOCs concentration in well MW-2 was 13.06 ppm. The predominant constituent in this well was trans-1,2-dichloroethene which along with vinyl chloride are degradation products of trichloroethene. According to the report prepared by IEP Environmental Consultants, it was suggested that the city sewer is a likely source of contamination. The contaminants in the sewer that were suggested to be seeped into the site ground water at MW-2 originated from off-site sources, namely the industries discharging into the sewer before it enters the Fostoria Industries Inc., property.

The third area of contamination in the shallow flow zone is at well MW-3, located in the upgradient area (southeast corner) of the site. MW-3 has a total VOCs level of 0.224 ppm and this level may be due to past solvent handling practices in this area or possible migration of contamination from an off-site source. It's recommended that soil sampling in the area surrounding MW-3 would be necessary to determine the actual source of contamination.

The deeper portion of the aquifer monitored at well MW-5 contained a total VOCs concentration of 0.519 ppm. This well is located hydraulically downgradient of the former trichloroethylene storage tanks and process degreasing area, and suggests that this location could be a potential source area for the contaminants found in this well (see Figure 2). However, additional study should include soil sampling and the installation of another deep well next to MW-1, will be needed to determine the source area. The upgradient deep well, MW-4, had non-detectable levels of the site contaminants.

Site Geology/Hydrogeology:

On-site drilling results indicate that the FII site is underlain by 5 to 10 feet of glacial overburden, consisting of a brown soil horizon with some scattered black gravel grading into a brown to gray silty clay. Fill material consisting of brick, concrete and sand was encountered at drilling locations near the existing site buildings. Bedrock consists of a tan to gray dolomite of the Lockport Formation. The upper 5 to 10 feet is severely weathered to a white/buff color and contains the water table aquifer. Drilling results indicated that the dolomite was moderately weathered from 15 to 30 feet below ground surface. The bedrock becomes more competent below a depth of 30 to 40 feet from ground surface. In general, the Lockport Dolomite is a fine grained carbonate with numerous small (<1 inch) solution cavities and some secondary calcite and quartz mineralization. Some fracturing was present at various locations within the 100 foot interval sampled by IEP and some rust staining was observed on the fracture surfaces indicating that they are water bearing fractures. Well logs obtained from Ohio Department of Natural Resources are attached in Appendix D.

Based on well development observations and well evacuation during sampling, the Lockport Formation is a prolific aquifer with estimated on-site yields of 50 to 100 gallons per minute for the deep wells, which are screened at 90 to 100 feet below ground surface. The weathered bedrock, which contains the water table surface and is monitored by the shallow wells, has an estimated yield of 15 to 20 gallons per minute.

Figure 4 contains a ground water elevation map for the shallow wells constructed from the ground water elevation data summarized in Table 3. As indicated by the map, shallow ground water flow is to the northwest, with a hydraulic gradient of 0.0024. Based on the limited amount of deep monitoring wells installed at the FII property, the deeper flow zone monitored by wells MW-4 and MW-5 also flows in the northwest direction where some of the residential wells were found to be contaminated (see Appendix E).

Table 3 Summary of Groundwater Elevation Data Fostoria Industries, Inc. October 1990							
(feet)	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	Site Well
Depth to water	12.09	12.70	11.30 ft	11.7	13.0	12.2	11.97
Top of Casing elevation	101.59	102.19	102.32	102.0	100.9	101.01	101.09
Groundwater Elevation	89.5	89.49	91.02	90.30	87.88	88.81	89.12
Screened Internal	8.5-18.5	8.0-18.0	6.0-16.0	90-100	90-100	7-17.0	None